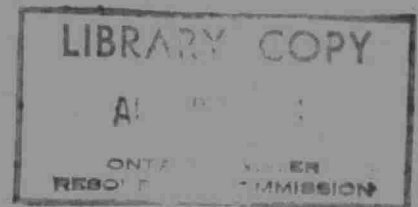




THE
ONTARIO WATER RESOURCES
COMMISSION
REPORT ON
WATER POLLUTION SURVEY
TOWNSHIP OF WEST GWILLIMBURY
COUNTY OF SIMCOE

1964



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INTRODUCTION

A study was made to assess the sanitary conditions of the watercourses providing drainage for the Township of West Gwillimbury.

Studies of this type are made routinely and upon request by the Ontario Water Resources Commission and are designed to locate any existing or potential sources of water pollution.

Recommendations are made pertaining to water pollution prevention and abatement. When water and sewage treatment works appear desirable, the Commission has a program to aid in the construction and financing of these works.

GENERAL INFORMATION

The Township of West Gwillimbury, with a resident population of approximately 2,455, is situated in the south-east section of the County of Simcoe.

The township's municipal offices are located on the south side of Highway No. 88 near the westerly limits of the Town of Bradford.

A municipal water and sewage works is operated in the Town of Bradford but no such works serve the township.

Domestic sewage from the residences is generally disposed of by means of private septic tank systems.

The installation of private sewage disposal systems is inspected by the staff of the Simcoe County Health Unit but inspections with respect to plumbing have not been inaugurated to date.

A summer cottage development, consisting of approximately 100 cottages, is located adjacent to Cook Bay in the north-east corner of the township.

The south-easterly part of the township is drained by means of the Schomberg River and an artificial drainage canal. Cook Bay which is part of Lake Simcoe provides drainage for the north-eastern portion of the municipality.

The upper reaches of Penville and Innisfil Creeks which are included in the Nottawasaga River watershed provide drainage for the north-westerly portion of West Gwillimbury.

REFUSE DISPOSAL

There is one municipal refuse disposal site operated in the township which is located on the 12th Line approximately 1.7 miles west of Highway No. 11. The garbage is dumped near the edge of a ravine and the combustible material is incinerated. Livestock on a nearby farm drink from a water-hole which is located below the dumping grounds.

A garbage collection service is provided by the township during the summer months only and this service is restricted to the Holland Marsh area.

Discussion

While there was no evidence of liquid wastes draining from this disposal site at the time of the examination, the possibility of seepage occurring intermittently does exist.

It is proposed that this dump be re-examined in the spring, under more favourable weather conditions.

At present, the industrial growth in the township is restricted to one vegetable packing plant and a cheese factory which are briefly described as follows:

1- Springdale Farms Limited

This plant is engaged in the washing and packing of vegetables.

Waste Disposal

Vegetable and equipment washings from the Springdale Farms Limited are discharged into a nearby pond.

The field surrounding the pond is underdrained with a system of tiles. The latter drain into a storage pond which is connected to the Schomberg River.

Discussion

The outlet from the pond was not located at the time of the survey. It is planned to examine this outlet during the warmer months to determine the quantity and quality of the discharge.

2- Salami Sweet Cheese Company

Various types of cheese are produced in this factory.

Waste Disposal

The greater portion of the whey from the plant was reportedly fed to pigs. The remainder, together with the floor and equipment washings, discharged to the ground surface. Run-off from the area in question is tributary to a nearby swamp.

Discussion

The waste from the plant was not advancing to reach the swamp during the time of the last inspection which was early in 1963.

The laboratory results of bacteriological examinations and sanitary chemical analysis of samples collected from the watercourses traversing West Gwillimbury are presented in Table 1 which is appended to this report.

All of the examinations and analyses were performed at the Ontario Water Resources Commission laboratory in Toronto.

A plan of the township showing the approximate locations of the sampling points and other pertinent information is included at the back of the report.

1- Significance of Laboratory Results

The OWRC objectives for surface water in Ontario are as follows:

5- day BOD - not greater than 4 ppm.

M.F. Coliform Count - not greater than 2,400 coliforms per 100 ml.

Discussion

While the biochemical oxygen demand (BOD) of the sample designated HOS - 7.2, which was collected from the Schomberg River at Highway No. 11, exceeded the Commission objective maximum on one occasion, the laboratory results revealed that the watercourses were generally satisfactory from a bacteriological and chemical viewpoint.

SUMMARY

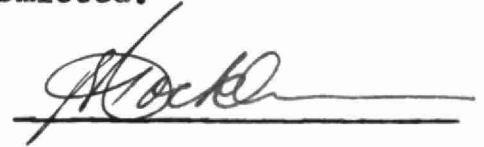
A survey to locate any existing or potential sources of water pollution in the Township of West Gwillimbury was made in December 1963. This survey did not reveal any significant pollution problems

insofar as the township is concerned. However, it will be necessary to re-assess the municipal refuse disposal site from a pollution viewpoint at a later date.

Inspections of the two plants mentioned in this report will be made on a routine basis by the Commission.

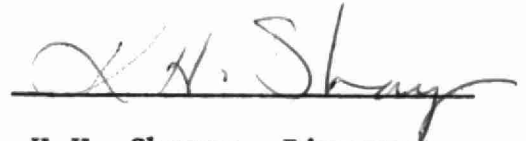
All of which is respectfully submitted.

District Engineer



P.G. Cockburn, P. Eng.

Approved by



K.H. Sharpe, Director.

PJW:ba

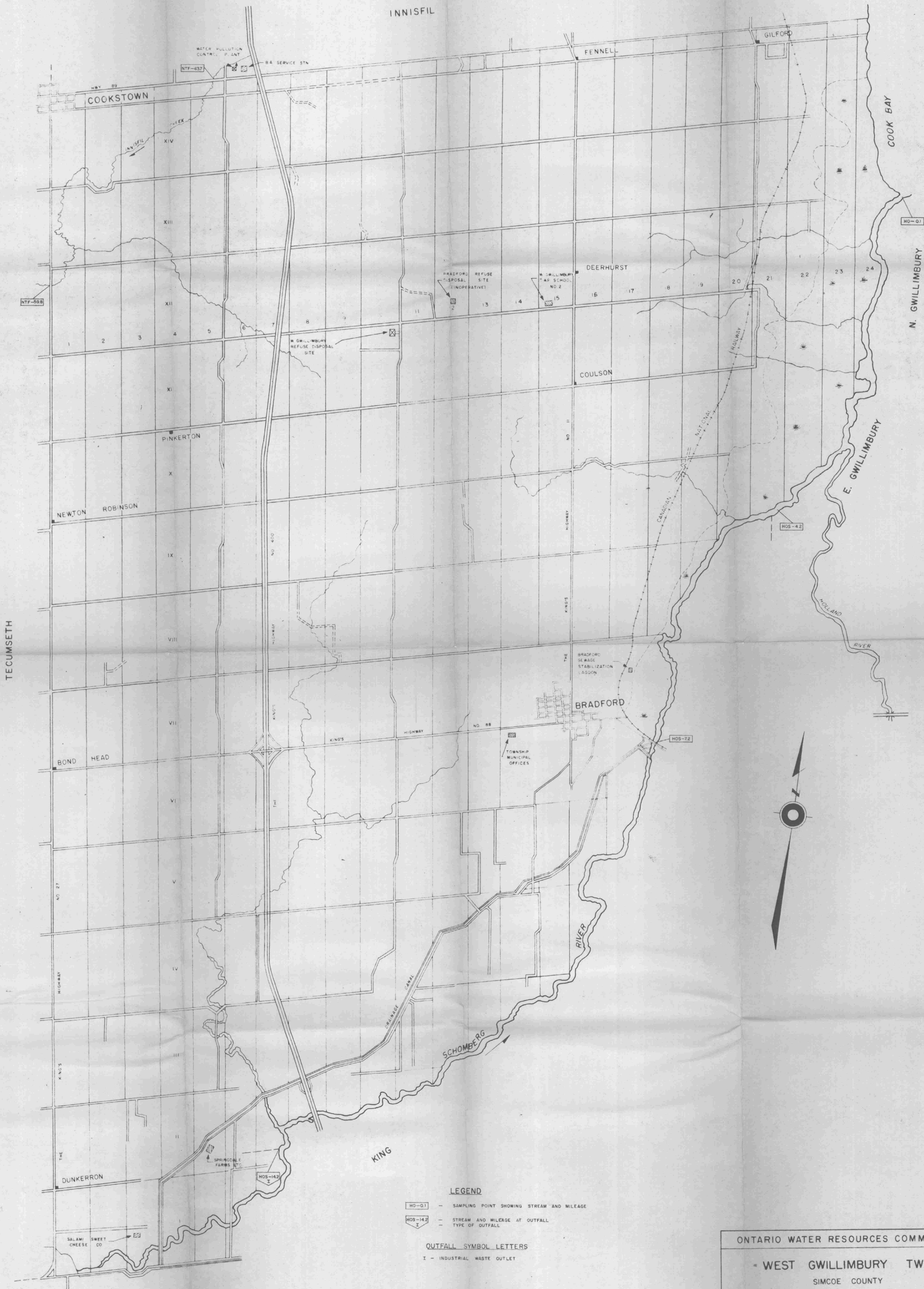
Prepared by:

P.J. WALSH

All Analyses Except pH Reported in
ppm Unless Otherwise Indicated.

TABLE 1-1
SCHOMBERG RIVER

<u>Sampling Point No.</u>	<u>Location</u>	<u>Date Examined</u>	<u>Coliforms per 100 ml</u>		<u>5-Day BOD</u>	<u>SOLIDS</u>			<u>Turbidity</u>
			<u>I.N.</u>	<u>M.F.</u>		<u>Total</u>	<u>Susp.</u>	<u>Diss.</u>	
HOS-14.2 I	Underdrain outlet - Springdale Farms Ltd.	Dec. 20/63	NOT LOCATED						
HOS-7.2	Schomberg River @ Highway No. 11 north side below junc- tion with drainage canals.	Aug. 10/60		270	3.0	273	10	263	-
		Sept. 6/61		100	2.7	274	-	-	7.0
		June 14/62		670	2.2	296	-	-	10.0
		July 30/63		420	5.0	306	20	286	-
HOS-4.2	Schomberg River 1.0 miles above junction with Holland River.	Aug. 10/60		20	3.5	278	12	266	-
		Sept. 6/61		42	3.2	-	-	-	5.
		July 30/63		300	-	-	-	-	-



ONTARIO WATER RESOURCES COMMISSION

WEST GWILLIMBURY TWP
SIMCOE COUNTY

SCALE 1/4" = 1 MILE

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